CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	Bulgaria	REPORT		25 X 1
SUBJECT	1. Ministry of Electrificati	on DATE DISTR.	9 February 19	·55
	2. Cleatric Power Stations	NO. OF PAGES	9	
DATE OF INFO.		REQUIREMENT NO.	RD	25 X 1
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- 1. The Ministry of Electrification, established in 1946, is located at No. 21, 6 September Street in Sofia, but a new building to house the ministry is being erected in the center of the city. During the early years most of the administrative and technical staff were experienced electrical technicians, but most of these were replaced by Party members or supporters. While the new staff was almost totally inexperienced in 1947 and 1948, it is now capable of solving both administrative and technical problems without having to obtain aid from foreign experts. The executive officers are Bulgarian; however, at one time Soviet experts formed part of the regular staff. These Soviet experts have left, and they come only occasionally for short periods to give advice on important or exceptionally difficult matters.
- 2. The ministry has four branches as follows:
 - a. Research, with three departments: one department each for stations using hydro-electric power, thermo-electric power, and diesel or other types of power. These three departments have a total staff of 160 to 180 persons, most of them qualified engineers;
 - b. Planning, which draws up detailed specifications for power stations, with three departments paralleling those of the Research Branch, plus a fourth department which plans both local and area networks. The four departments together employ about 300 persons, including engineers, technicians and draftsmen. An additional 30 persons were borrowed some time ago from area electrical organisations for the overall planning of developments for the Five Year Plan to begin in 1955;
 - c. Construction, which builds the power stations and erects machinery, has five departments: three for power stations (hydro-electric, thermo-electric, and diesel), one for construction of local and area electric grids, and one for administration. With a staff of 150 persons, this branch is the only one still employing a considerable number of non-Party specialists. In the period of greatest activity, 1949 to 1952, when all of the equipment bought in the preceding years was installed, a maximum of 250 technicians were employed. Therefore this time the output of electric power in Bulgaria was tripled; and

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- d. Production, with three departments: one each for hydro-electric and fuel operated power stations, and one for such general administrative purposes as the establishment of tariffs, safety devices, modernization, etc. These three departments together employ between 90 and 100 engineers and technicians.
- 3. In May 1954, an Electricity Committee was established by the Council of Ministers. This committee is made up of seven members, including two professors from the Sofia Polytechnical College, and its function is to advise the Prime Minister on all matters connected with electricity.
- 4. In June 1954, for administrative purposes, Bulgaria was divided into seven electrification areas (Elektrifikatsionni Oblasti). These areas are Sofia, Plovdiv, Ruse, Stalin, Pleven, Kolarovgrad, and Burgas, each with a central electrification office under the direct control of the Ministry of Electrification. The offices are responsible for the maintenance of the power stations and grids in their areas, for the distribution of electric power, and the installation of electricity for both the government and private consumers.
- 5. "El-Prom" (Electrichesko Promishlenost; State Electrical and Industrial Association), a special body directly controlled by the Ministry of Electrification, supervises all electrical industries in Bulgaria. It is located at 25 Stalin Boulevard. in Sofia. Among the enterprises controlled by "El-Prom" is the Silnotokov Zavod Vasil Kolarov, located near the Voenna Rampa railroad station outside of Sofia. This factory produces electrical motors up to 100 HP, generators up to 350 KVA, transformers with automatic regulation up to 12,000 KVA, oilbreak switches, separating switches, ceramic switches, condensers, and electric meters.
- 6. Bulgaria became self-sufficient in the manufacture of low-tension equipment a number of years ago, and since the end of 1953 has also been self-sufficient in other equipment, with the exception of certain heavy items such as large transformers over 12,000 KVA, steam and gas turbines, expansion switches, safety devices, signalling equipment, and special textile machinery. About 90 percent of the requirements in these items are obtained from other satellite countries and 10 percent from the West. Seventy percent of the latter figure comes from West Germany.
- 7. Total electricity production in 1939 was approximately 325 million KW hours; by 1953 this figure had risen to one billion, 638 million KW hours. Consumption per inhabitant rose as follows:
 - a. Forty KW hours in 1939;
 - b. Seventy-five KW hours in 1948;
 - c. One hundred and eighty KW hours in 1952; and
 - d. Two hundred and fifteen KW hours in 1953.
- 8. In 1946 most cities had electricity and 98 percent of the city population lived in houses having electricity, but only 30 percent of the village population had electricity in their homes. By 1953 the number of localities supplied with electric power had risen to 2800 and about 73 percent of the total population had electricity. Between 1955 and 1958 service is to be extended to 85 percent of the population.
- 9. The next Five Year Plan calls for the addition of 350,000 KW to existing capacity, and a five percent increase in the production of old stations by means of more efficient operation. Because of the limited amount of coal available, two-thirds of the additional capacity will come from hydro-electric stations. The most important new

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hydro-electric stations planned are as follows:

- a. "Batak", in the Rhodope Mountains, with a capacity of 30,000 KW.;
- b. "Studen Kladenets", near Pancherevo, outside of Sofia, with a capacity of 60,000 kW.;

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- c. "Debrashtitsa" and "Aleko", with a capacity of 68.000 KW.;
- d. "Kokaliyane" and "Pasarel" stations, in the Samokov district, with a total capacity of 48.000 KW.; and
- e. "Stara Zagora", with a capacity of 20,000 KW.
- 10. There are no detailed plans for new fuel-operated power stations, but the following increases in capacity are planned:
 - a. "Nadezhda", in Sofia, to be increased by two new units of 25,000 KW. each;
 - b. "Republika", at Dimitrovo, and "Vulko Chervenkov", at Dimitrovgrad, each to be increased by 25,000 KW.; and
 - c. The old power station at Dimitrovo, to be increased by 12,500 KW.
- 11. The plan provides for a number of small power stations with diesel engines in strategic positions to serve as alternative power sources in an emergency. Small stations of this type are to be built in the Pleven, Gorna Gryakhovitsa, Vratsa, and Chirpan districts, and later in the Sofia area. Maximum capacity will be 10,000 kW, and equipment is to be as simple as possible.
- 12. The inter-urban high tension electric grid is to be extended by another 2,000 kilometers, mainly on the following lines:
 - a. Dimitrovgrad-Burgas;
 - b. Razgrad-Gorna Oryakhovitsa;
 - c. Tolbukhin-Devnya-Polyanovgrad; and
 - d. Devnya-Kolarovgrad.

Later a 220,000 volt line is to be installed through Gorna Cryakhovitsa to Ruse, to increase the exchange of power between Bulgaria and Rumania.

13. In the Appendix is a list of power stations in Bulgaria. This list is incomplete both as to figures and number of stations listed. The 1939 output figures are total figures, including the output of stations not listed. The seven districts listed in paragraph 16 is for statistical use by the Council of Ministers only.

Comment: 1. "El-Prom" is listed in the 1952 edition of the Sofia Telephone
Directory as being located at #9 Alabin Street.

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LOCATION	TYPE	Approved For Release 2008/02/22 : CIA-RDP80-00810A005900540002-9 MENTS							
Sofia District		1939	<u> 1953-4</u>	1939	<u> 1953-4</u>	(in 1,000 KW hours)	494		
Kurilo Station (N 42-49, E 23-21)	Thermo- electric	27,450	27,450	25,500	25,500		Four units; two of 12,800 KW, in use since 1928; Brown-Eoveri turbines.		
Nadezhda Station (Sofia Tets Stalin)	Thermo- electric		26,500		24,000		Two units; one British- made turbine in use since 1948, and one Soviet-made in use since 1951.		
Pernik (Dimitrovo, Kohlengruben)	Thermo- electric	11,600	121,600	11,400	111,400		Eight units; four of 11,600 KW in use since 1928-30, and four since 1952-53.		
Boyana (N 42-38, E 23-16)	Hydro- electric	2,000	2,000	1,720	1,720		Two units, both Pelton- Voith in use since 1923.		
Simeonovo (N 42-37, E 23-20)	Hydro- electric	9,000	9,000	8,860	8,860		Four units, all Pelton- Voith in use since 1927-30.		
Mala Tsurkva (N 42-15, E 23-30)	Hydro- electric	6,000	6,000	6,000	6,000		Two units, both Pelton- Voith turbines, in use since 1935.		
Pancharevo (N 42-36, E 23-25)	Hydro- electric	4,560	4,560	3,760	3,760		Six units, Bell spiral turbines, and Electricité de Genève, in use since 1900.		
Rila (N 42-08, E 23-08)	Hydro- electric	9,000	9,000	8,000	8,000		Two units, Voith spiral turbines, in use since 1928.		
Swoge (N 42-58, E 23-21)	Hydro- electric	287	287	250	250		Two units, Fransis Escher, Wys and Neumayer, in use since 1927.		
Gurlyane (m 42-15, E 22-34)	Hydro- electric	760	760	640	640		Two units, Pelton Skoda, in use since 1927.		
Pastra (N 42-07, E 23-13)	Hydro- electric	7,800	7,800	6,900	6,900		Two units, Franzis-Voith, in use since 1923-27.		
Kalin (N 42-11, E 23-17)									

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LOCATION	TYPE	Approve	ed For Rele	ase 2008/0	02/22 : CIA-F	RDP80-00810A0059005400	002-9 gg			
Plovdiv District		1939	1953-4	1939	1953-4	(in 1,000 KW hours)	202-9 CURIMENTS			
Plowdiw city	Thermo- electric	6,850		6,400			Three units, two of 3,200 HP in use since 1927, Stal turbines.			
Bansko (N 41-49, E 23-29)	Hydro- electric	143		125	125		One unit; Franzis-Voith, in use since 1926.			
Levskigrad	Hydro- electric	1,575	1,575	1,490	1,490		Two units; Pelton, Neumeyer turbines, in use since 1927-31.			
Peshtera	Hydro- electric	175	175	145	145		Two units; Franzis-Voith, in use since 1924.		SECRET	
Krichim village (N 42-03, E 24-26)	Hydro- electric	10,000		8,200			Three units.		ŀ	
Chepelare village (N 41-43, E 24-41)	Hydro- electric	139	139	100	100		Two units; Franzis and Pelton- Voith turbines in use since 1925-27.	, V	U.S. OFF	
Asenitsa (village near Asenovgrad) and two similar power stations: Asenitsa I and Asenitsa II				- -			Each station has four units, with Italian turbines built in 1952-53, with a total joint power potential of 8,000 KW.	*	OFFICIALS ONLY	
						41,652				
Stara Zagora District	2							ī		7 051/4
Maritsa (villa) ((N°42-03, E:25+50)	Thermo- electric	8,700		8,500						25X1
Chernokoneovo (Nº 42-04, £ 25-32)	Thermo- electric	; 1,040		3,750						
Enina (N L2-L0, E 25-25)	Hydro- electric	700	700	600	600		Two units; Pelton, Bell turbines in use since 1912.	,		

LOCATION	TYPE	Approved	For Relea	se 2008/02 GENERATO	2/22 : CIA-RI DKS: KVA	DP80-00810A0059005400	002-9 CUMMENTS	
		1939	1953-54	1939	1953-4	(in 1,000 KW hours	DO2-9 COMMENTS POPON	
Kurdzhali	Diesel	153		106			Two units; Pelton, Bell turbines, in use since 1912.	
Nova Zagora	Diesel	180		150				
Sliven	Diesel	800		760				
Kharmanli	Diesel	120		85				
Yambol	Diesel	530		425				SI
Kasanluk	Diesel	1,600		1,525				Secret
Bimitrovgrad (Nh2-Oh, E 25-37)	Thermo- electric						Four units; two Soviet and two Swedish, power potential 100,000 kW. This station is operated in part on waste steam from other enterprises.	. u.s.
Kolarovgrad (Shumen) District						25,150		OFFICIALS ONLY
Omortag	Thermo- electric	145		65				
Batova (N 43-21, E 28-04)	Hydro- electric	437		435				25X1
Stalin (Varna)	Diesel	1,710		1,580				
. •	Thermo-	1,100		_,,,,,				
i i	Thermo- electric Thermo- electric	1,100					Two units in use since 1940, power potential 3,000 KW.	
Provadiya	electric Thermo-	1,100 510		•				
Provadiya Rasgrad	electric Thermo- electric							

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LOCATION	TYPE	Approved	For Relea	se 2008/02	/22 : CIA-RI	DP80-00810A00590054000	12-9 MMENTS	
		1939	1953-4	1939	<u> 1953-4</u>	(in 1,000 KW hours)	12-9 MMENTS Prendix	
Kolarovgrad (Shumen)	Diesel	630		535				
Dolni Chiflik (N 42-59, E 27-42)	Diesel	160		125				
Kaspichan Station (N 43-18, E 27-11)	Diesel	100		94				
Kubrat	Diesel	100		75				
Burgas District						13,156		SECRET
Rudnik (N 42-37, E 27-29)	Thermo- electric	9,200		8,500			Four-units, turbines in use since 1927-37.	1
						1h,550	- 7	u.s. (
Pleven District							•)L££(
Tryavna (N 42-52, E 25-30)	Thermo- electric	3,700		3,400			Two units in use since 1931-33	OFFICIALS ONLY
Cherven Bryag (N li3-16, E 21:-06)	Thermo- electric	500		310				XTX.
Lovech	Hydro- electric	1,00		360				
Batoshevo (H 42-54, E 25-05)	Hydro- electric	750		620			Two units; Franzis Genz turbines, in use since 1922-25.	25X1
Troyan	Hydro- electric	323		290				
Cholakovtsi (N 43-04, E 25-36)	Hydro- electric	282		250			Two units; Fransis-Danek turbines in use since 1922-25.	
Byala Cherkova (N 13-12, E 25-19)	Hydro- electric	160		100				

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